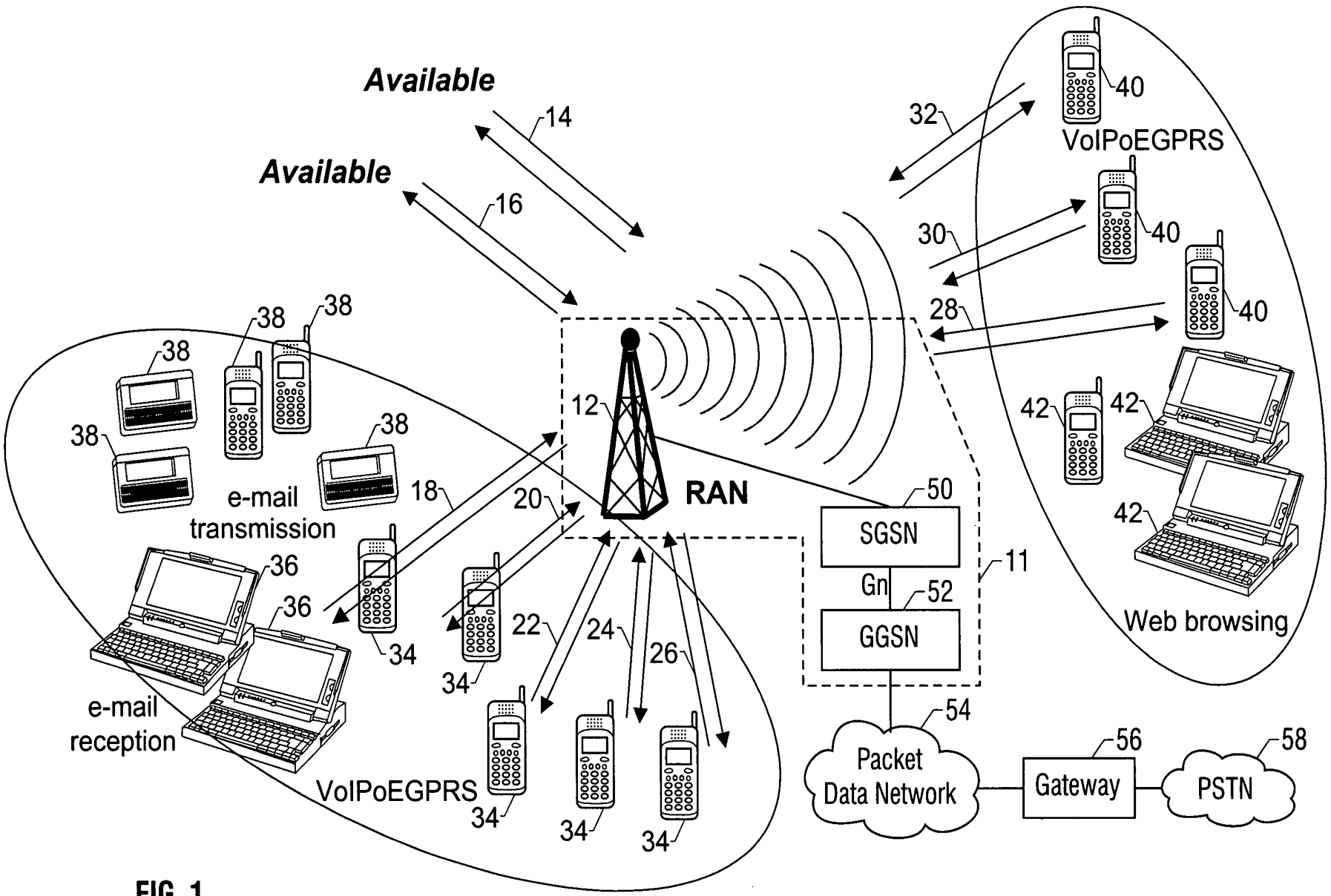


FIG. 1

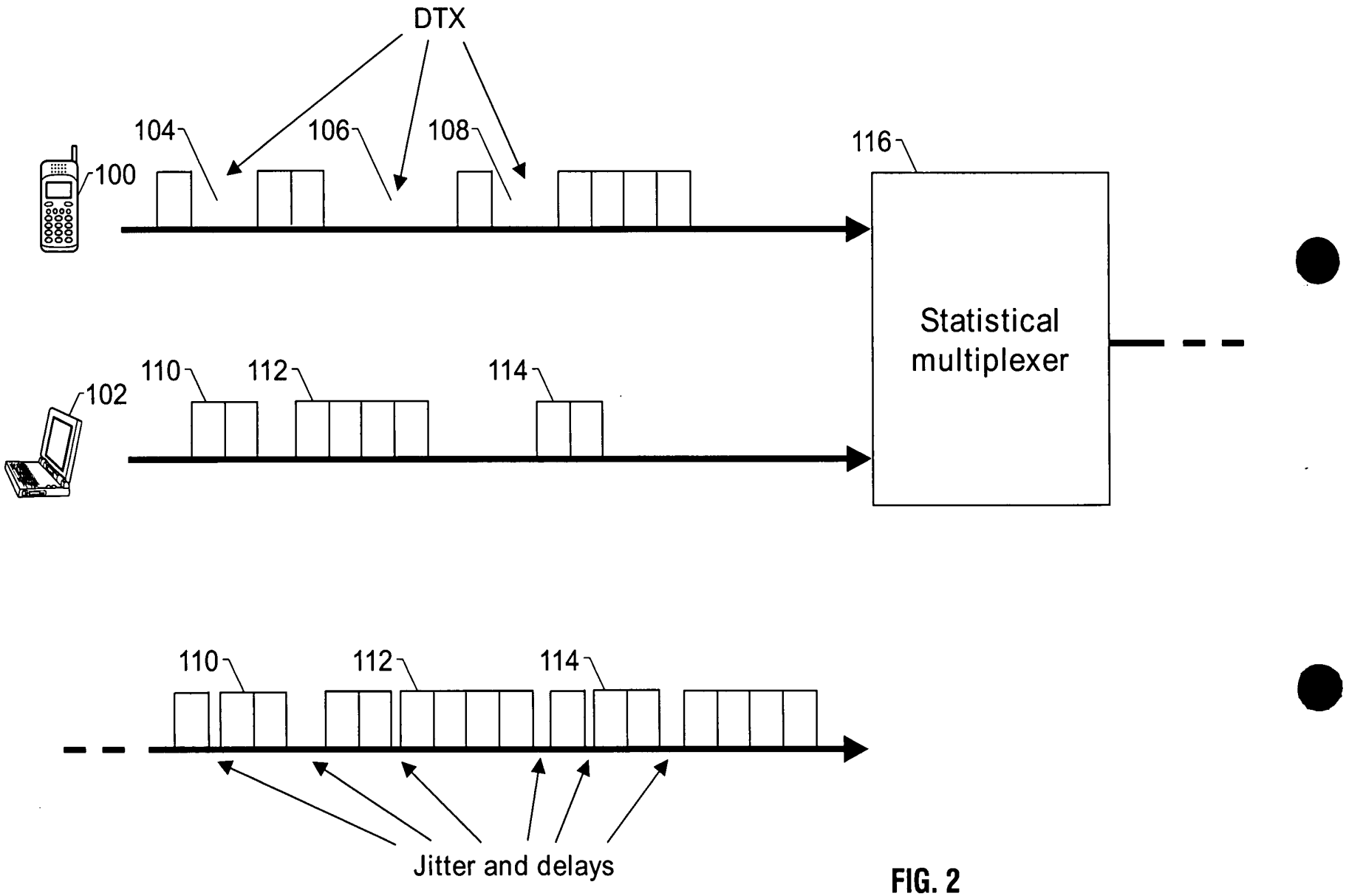


FIG. 2

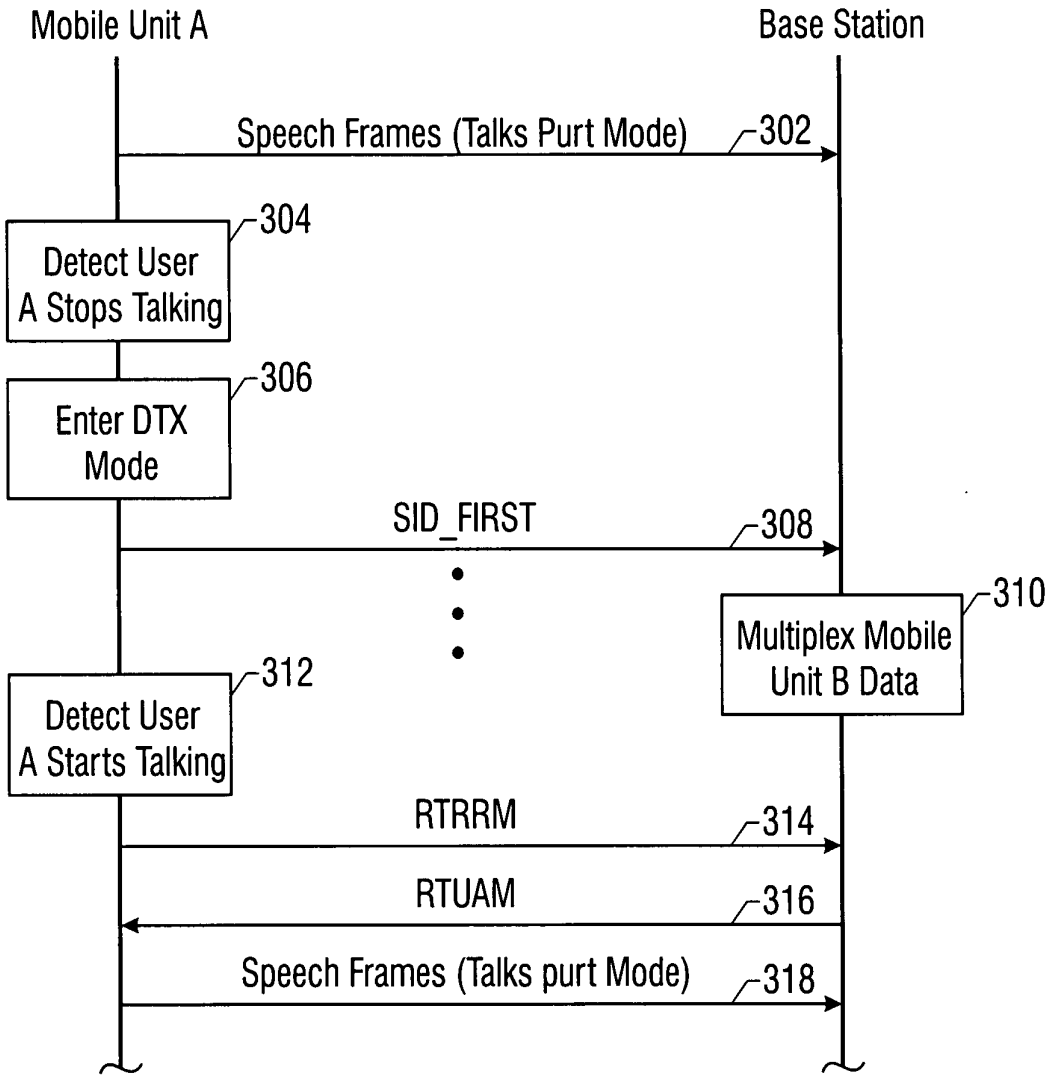


FIG. 3

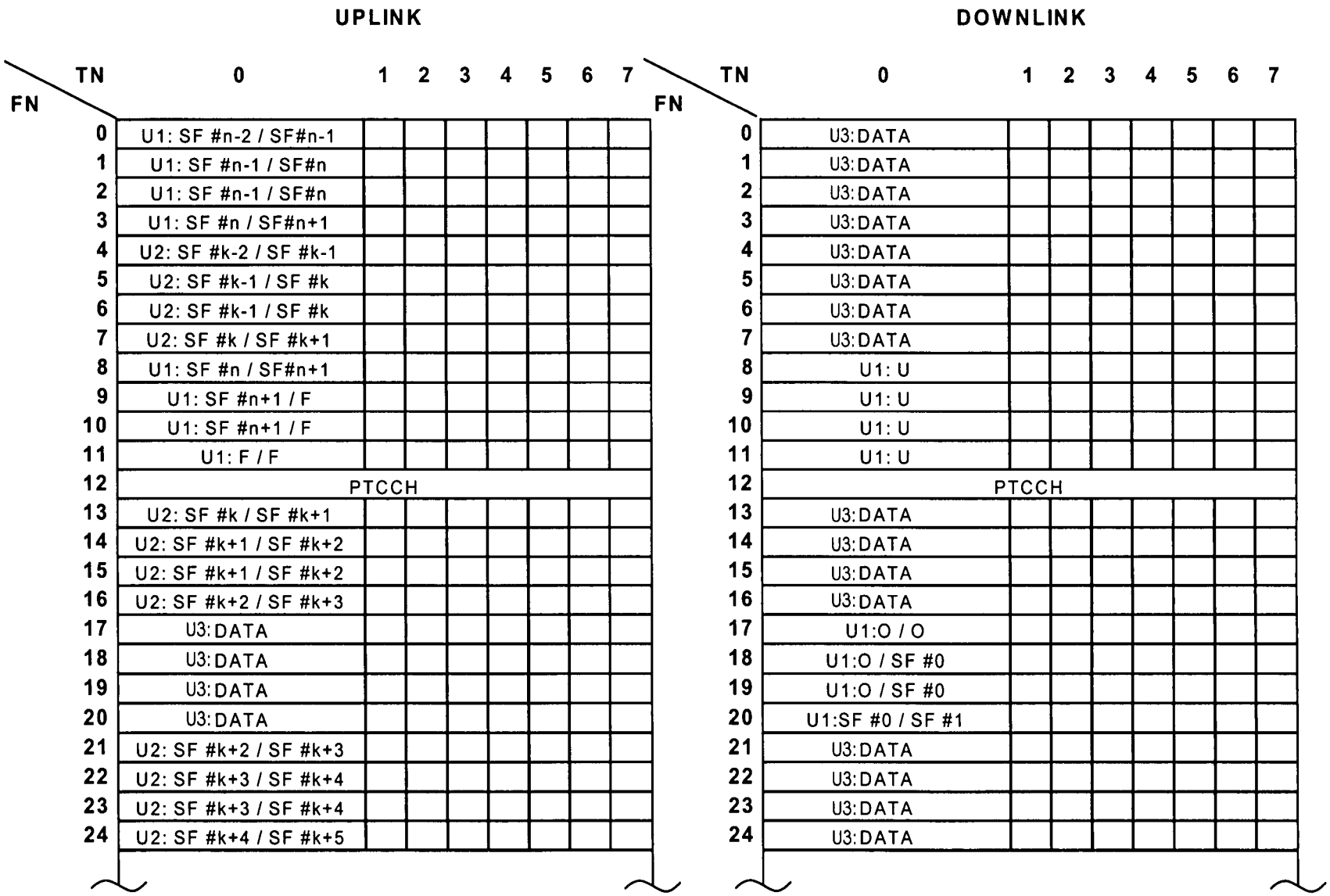
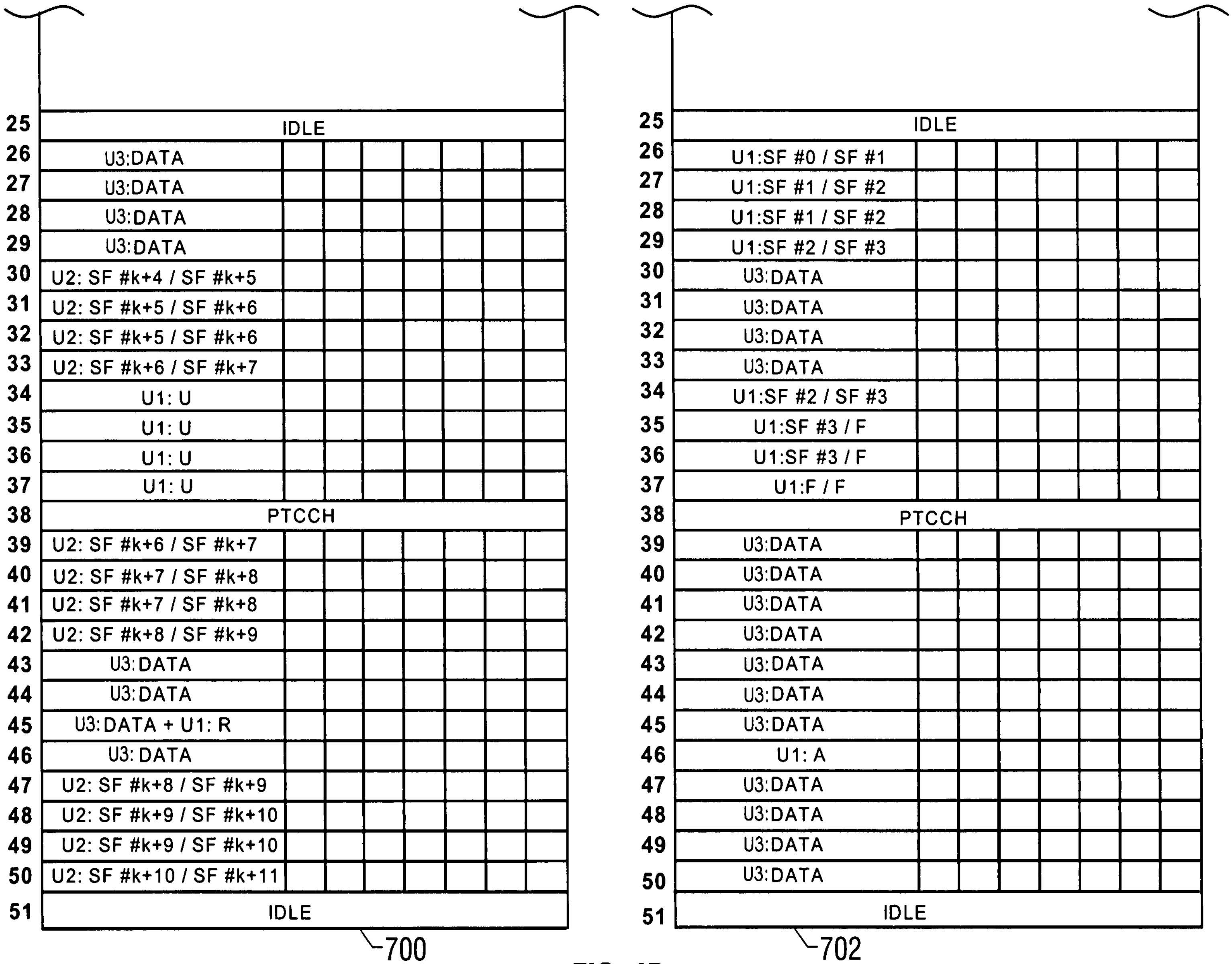

UPLINK
TN
FN
0 1 2 3 4 5 6 7
0 U1: SF #n-2 / SF#n-1
1 U1: SF #n-1 / SF#n
2 U1: SF #n-1 / SF#n
3 U1: SF #n / SF#n+1
4 U2: SF #k-2 / SF #k-1
5 U2: SF #k-1 / SF #k
6 U2: SF #k-1 / SF #k
7 U2: SF #k / SF #k+1
8 U1: SF #n / SF#n+1
9 U1: SF #n+1 / F
10 U1: SF #n+1 / F
11 U1: F / F
12 PTCCH
13 U2: SF #k / SF #k+1
14 U2: SF #k+1 / SF #k+2
15 U2: SF #k+1 / SF #k+2
16 U2: SF #k+2 / SF #k+3
17 U3:DATA
18 U3:DATA
19 U3:DATA
20 U3:DATA
21 U2: SF #k+2 / SF #k+3
22 U2: SF #k+3 / SF #k+4
23 U2: SF #k+3 / SF #k+4
24 U2: SF #k+4 / SF #k+5
DOWNLINK
TN
FN
0 1 2 3 4 5 6 7
0 U3:DATA
1 U3:DATA
2 U3:DATA
3 U3:DATA
4 U3:DATA
5 U3:DATA
6 U3:DATA
7 U3:DATA
8 U1: U
9 U1: U
10 U1: U
11 U1: U
12 PTCCH
13 U3:DATA
14 U3:DATA
15 U3:DATA
16 U3:DATA
17 U1:O / O
18 U1:O / SF #0
19 U1:O / SF #0
20 U1:SF #0 / SF #1
21 U3:DATA
22 U3:DATA
23 U3:DATA
24 U3:DATA

FIG. 4A


25
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35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
IDLE
U3:DATA
U3:DATA
U3:DATA
U3:DATA
U2: SF #k+4 / SF #k+5
U2: SF #k+5 / SF #k+6
U2: SF #k+5 / SF #k+6
U2: SF #k+6 / SF #k+7
U1: U
U1: U
U1: U
U1: U
PTCCH
U2: SF #k+6 / SF #k+7
U2: SF #k+7 / SF #k+8
U2: SF #k+7 / SF #k+8
U2: SF #k+8 / SF #k+9
U3:DATA
U3:DATA
U3:DATA + U1: R
U3: DATA
U2: SF #k+8 / SF #k+9
U2: SF #k+9 / SF #k+10
U2: SF #k+9 / SF #k+10
U2: SF #k+10 / SF #k+11
IDLE
700
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
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41
42
43
44
45
46
47
48
49
50
51
IDLE
U1:SF #0 / SF #1
U1:SF #1 / SF #2
U1:SF #1 / SF #2
U1:SF #2 / SF #3
U3:DATA
U3:DATA
U3:DATA
U3:DATA
U1:SF #2 / SF #3
U1:SF #3 / F
U1:SF #3 / F
U1:F / F
PTCCH
U3:DATA
U3:DATA
U3:DATA
U3:DATA
U3:DATA
U3:DATA
U3:DATA
U1: A
U3:DATA
U3:DATA
U3:DATA
U3:DATA
IDLE
702

FIG. 4B

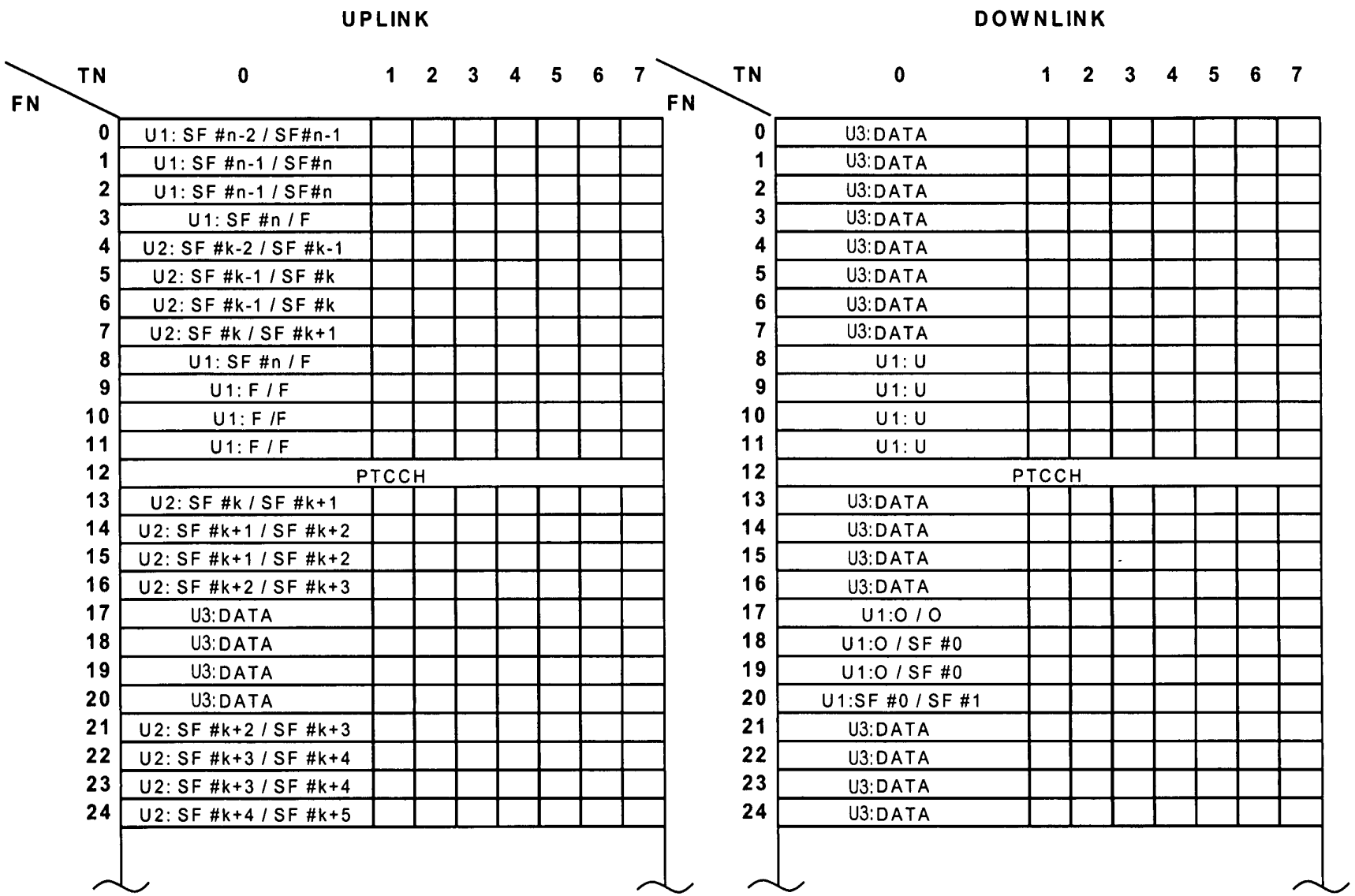


FIG. 5A

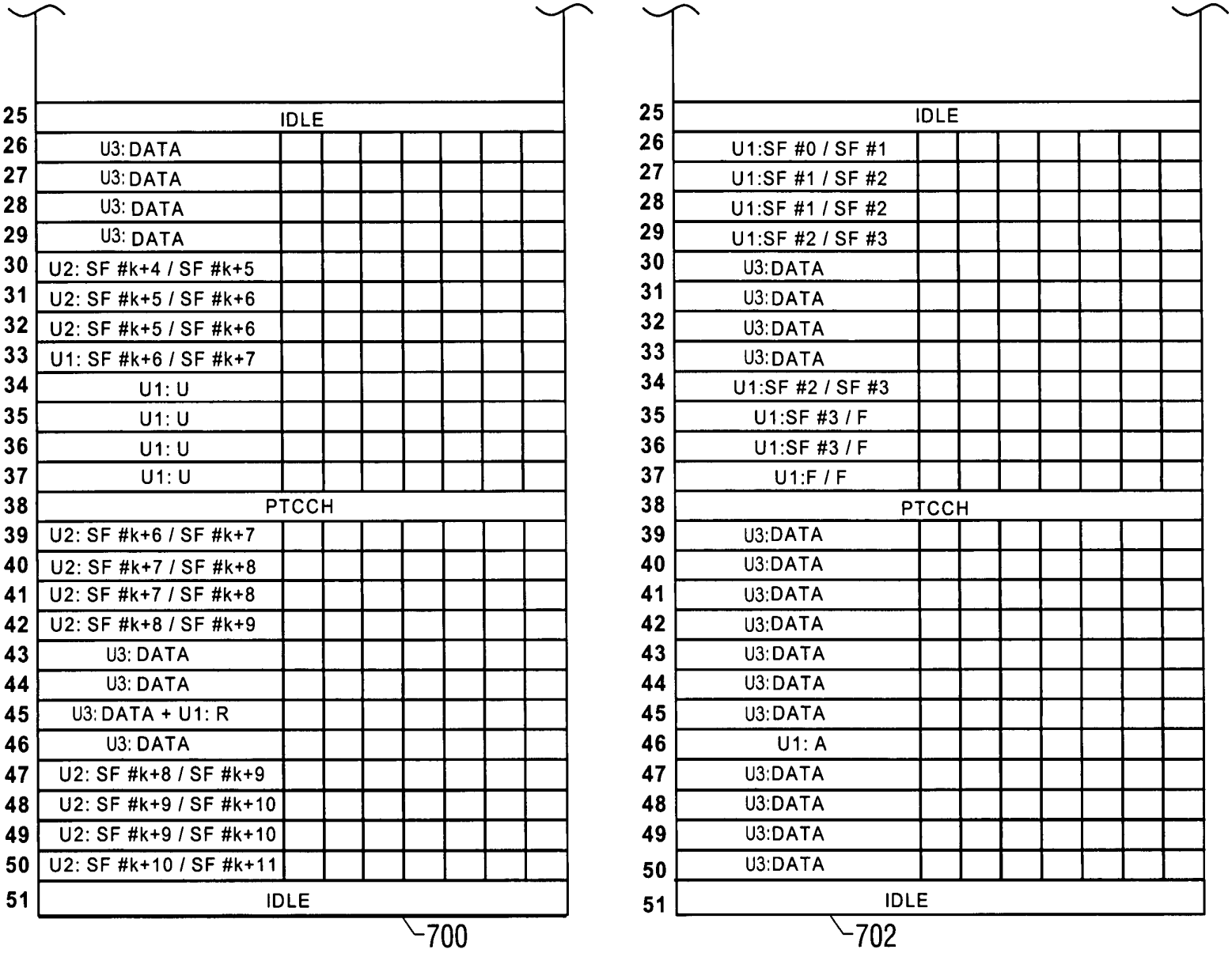


FIG. 5B

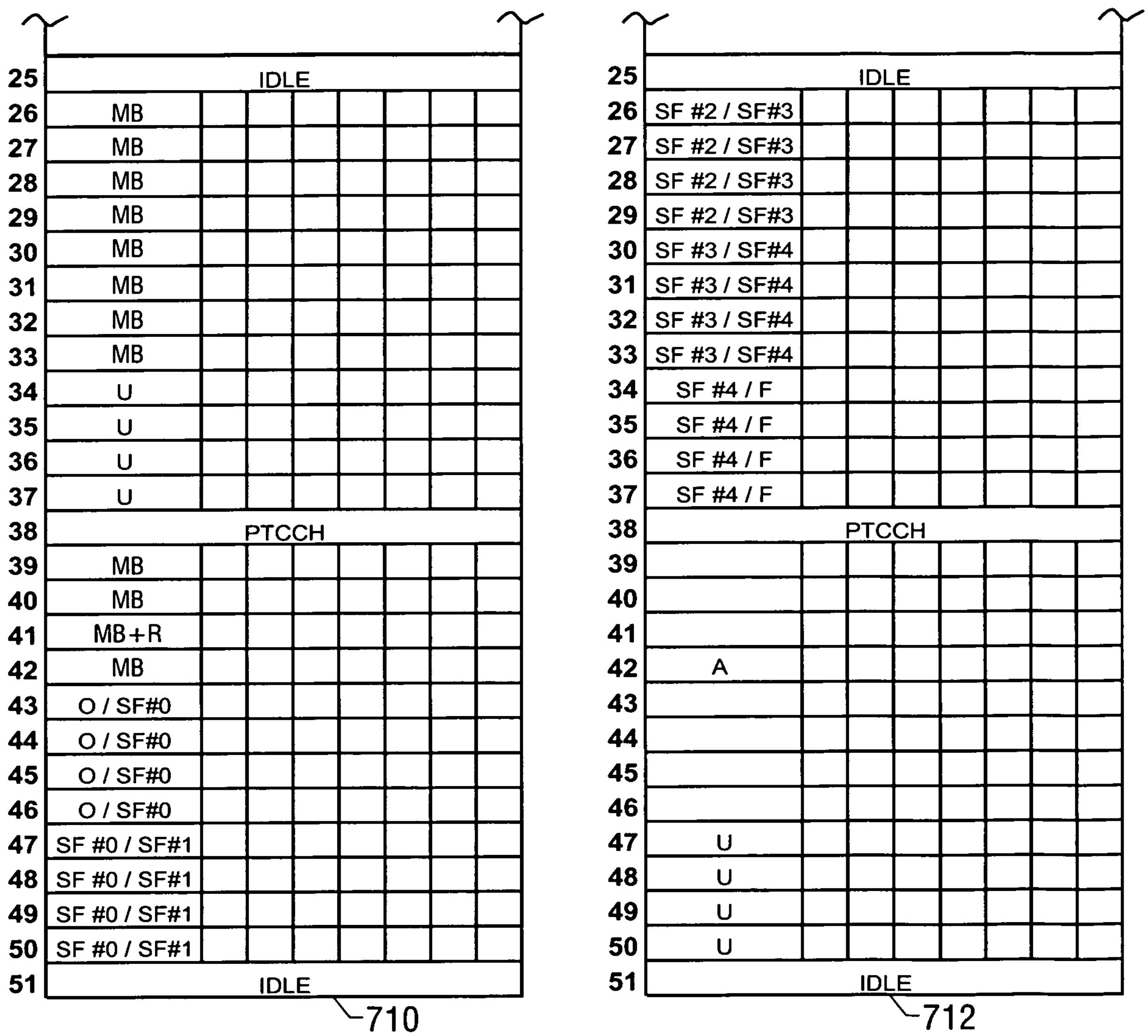
UPLINK

FN \ TN	0	1	2	3	4	5	6	7
0	SF #0 / SF#1							
1	SF #0 / SF#1							
2	SF #0 / SF#1							
3	SF #0 / SF#1							
4	SF #1 / SF#2							
5	SF #1 / SF#2							
6	SF #1 / SF#2							
7	SF #1 / SF#2							
8	SF #2 / F							
9	SF #2 / F							
10	SF #2 / F							
11	SF #2 / F							
12	PTCCH							
13	MB							
14	MB							
15	MB							
16	MB							
17	MB							
18	MB							
19	MB							
20	MB							
21	U							
22	U							
23	U							
24	U							

DOWNLINK

FN \ TN	0	1	2	3	4	5	6	7
0	MB							
1	MB							
2	MB							
3	MB							
4	MB							
5	MB							
6	MB							
7	MB							
8	U							
9	U							
10	U							
11	U							
12	PTCCH							
13	O / SF#0							
14	O / SF#0							
15	O / SF#0							
16	O / SF#0							
17	SF #0 / SF#1							
18	SF #0 / SF#1							
19	SF #0 / SF#1							
20	SF #0 / SF#1							
21	SF #1 / SF#2							
22	SF #1 / SF#2							
23	SF #1 / SF#2							
24	SF #1 / SF#2							

FIG. 6A



Minimum
Delay

FIG. 6B

UPLINK

FN \ TN	0	1	2	3	4	5	6	7
0	SF #0 / SF#1							
1	SF #0 / SF#1							
2	SF #0 / SF#1							
3	SF #0 / SF#1							
4	SF #1 / SF#2							
5	SF #1 / SF#2							
6	SF #1 / SF#2							
7	SF #1 / SF#2							
8	SF #2 / F							
9	SF #2 / F							
10	SF #2 / F							
11	SF #2 / F							
12	PTCCH							
13	MB							
14	MB							
15	MB							
16	MB							
17	MB							
18	MB							
19	MB							
20	MB							
21	U							
22	U							
23	U							
24	U							

DOWNLINK

FN \ TN	0	1	2	3	4	5	6	7
0	MB							
1	MB							
2	MB							
3	MB							
4	MB							
5	MB							
6	MB							
7	MB							
8	U							
9	U							
10	U							
11	U							
12	PTCCH							
13	O / SF#0							
14	O / SF#0							
15	O / SF#0							
16	O / SF#0							
17	SF #0 / SF#1							
18	SF #0 / SF#1							
19	SF #0 / SF#1							
20	SF #0 / SF#1							
21	SF #1 / SF#2							
22	SF #1 / SF#2							
23	SF #1 / SF#2							
24	SF #1 / SF#2							

FIG. 7A

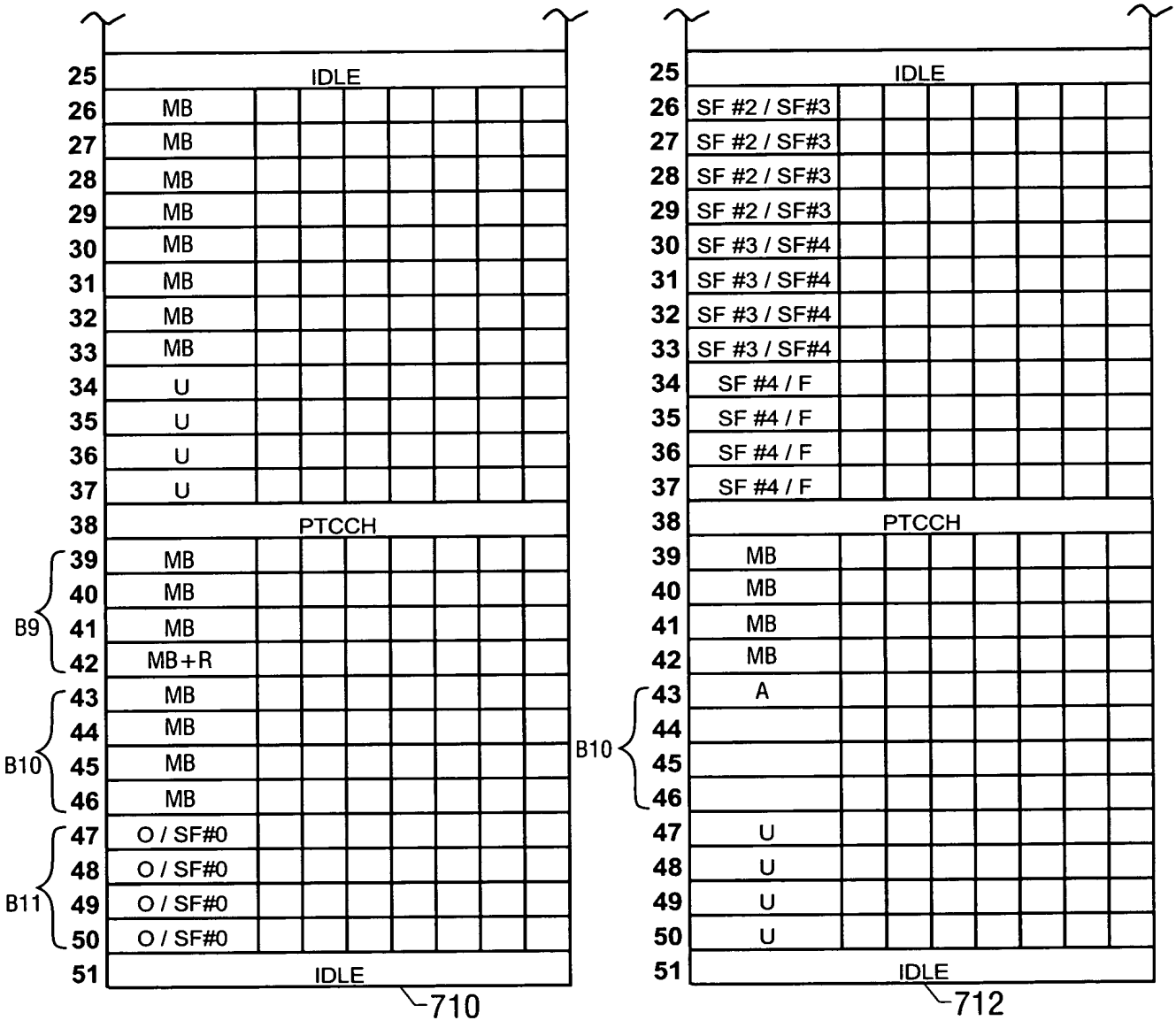

25 IDLE
26 MB
27 MB
28 MB
29 MB
30 MB
31 MB
32 MB
33 MB
34 U
35 U
36 U
37 U
38 PTCCH
39 MB
40 MB
41 MB
42 MB+R
43 MB
44 MB
45 MB
46 MB
47 O / SF#0
48 O / SF#0
49 O / SF#0
50 O / SF#0
51 IDLE
B9
B10
B11
710
25 IDLE
26 SF #2 / SF#3
27 SF #2 / SF#3
28 SF #2 / SF#3
29 SF #2 / SF#3
30 SF #3 / SF#4
31 SF #3 / SF#4
32 SF #3 / SF#4
33 SF #3 / SF#4
34 SF #4 / F
35 SF #4 / F
36 SF #4 / F
37 SF #4 / F
38 PTCCH
39 MB
40 MB
41 MB
42 MB
43 A
44
45
46
47 U
48 U
49 U
50 U
51 IDLE
B10
712
Maximum
Delay

FIG. 7B

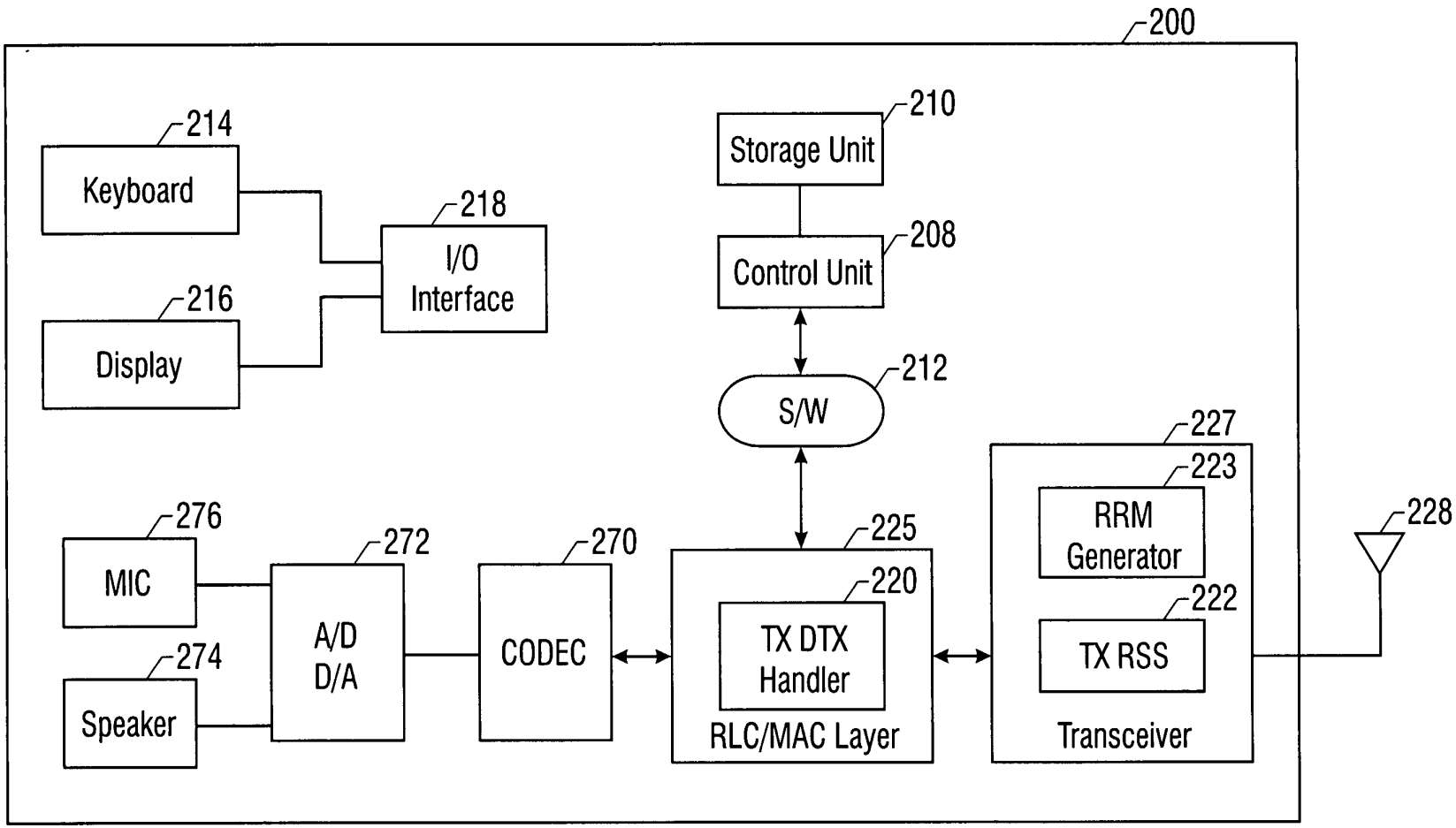


FIG. 8A

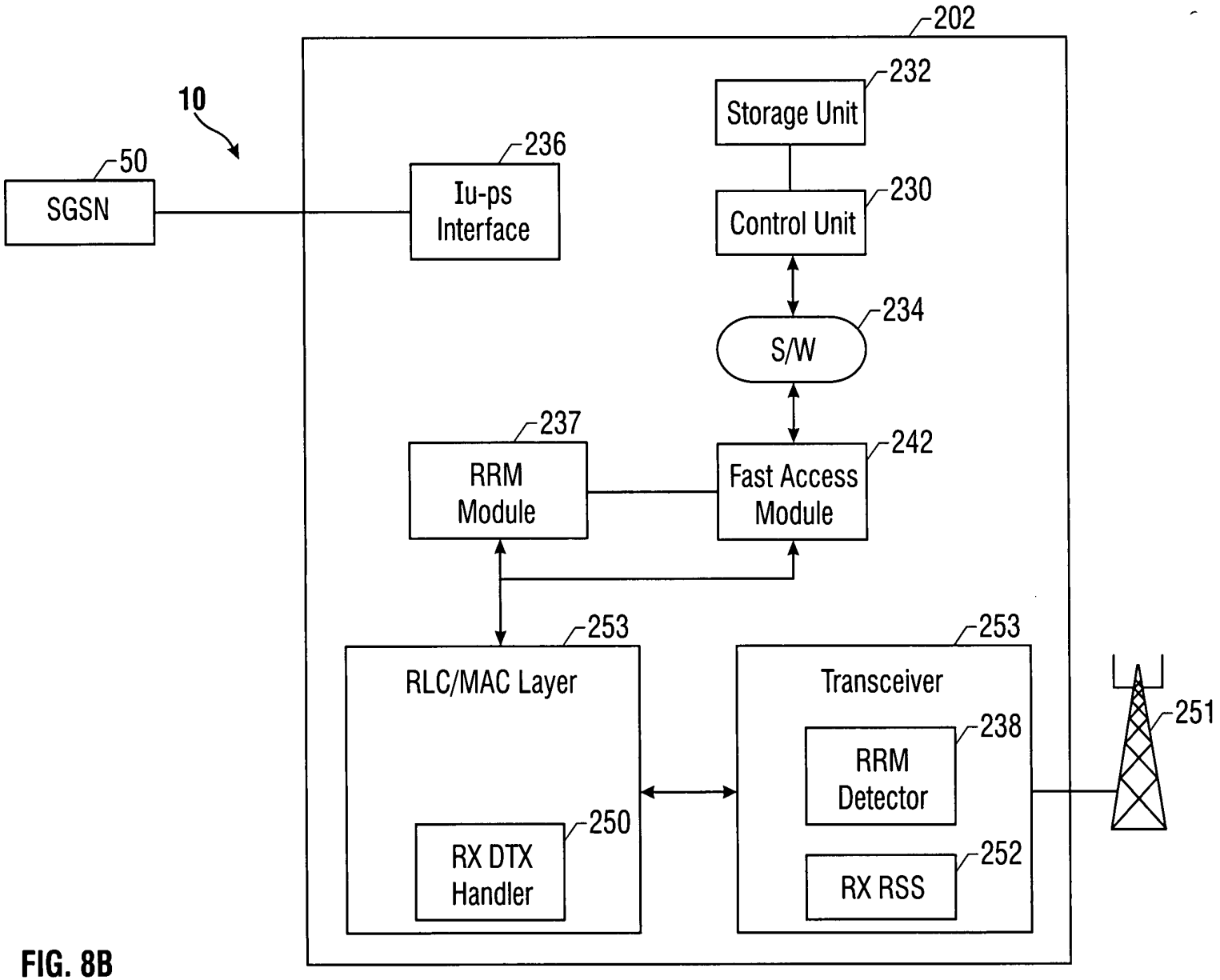
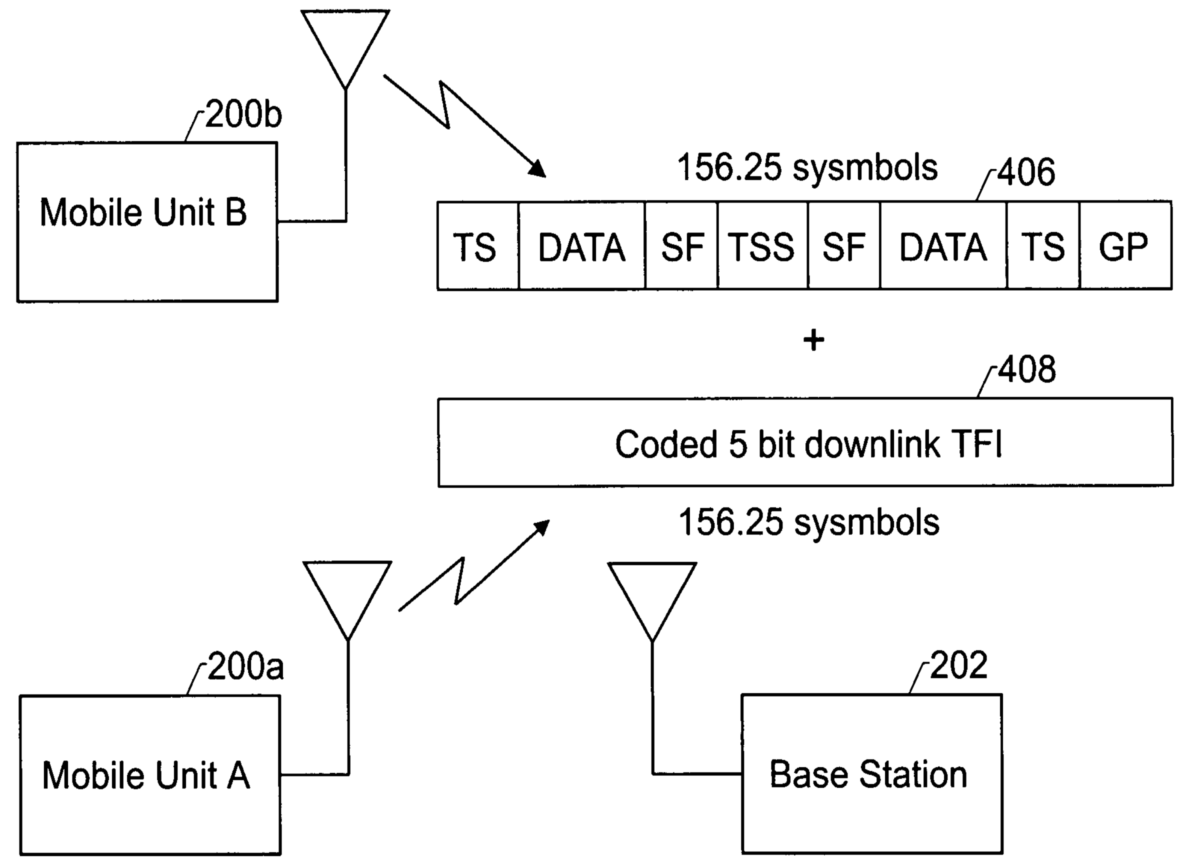


FIG. 8B



200b
Mobile Unit B
156.25 sysmbols
406
TS
DATA
SF
TSS
SF
DATA
TS
GP
+
408
Coded 5 bit downlink TFI
156.25 sysmbols
200a
Mobile Unit A
202
Base Station

FIG. 9

RTUAM

500

502

< RTFACCH Uplink Assignment Message

Message content > :: =

< **TFI**: bit (5) >

{0|1 < **Uplink_TFI_ASSIGNMENT**: bit (5) >}

< **TSC**: bit (3) >

< **ARFCN**: bit (10) >

< **TIMESLOT_ALLOCATION**: bit (8) >

< padding bits >;

FIG. 10

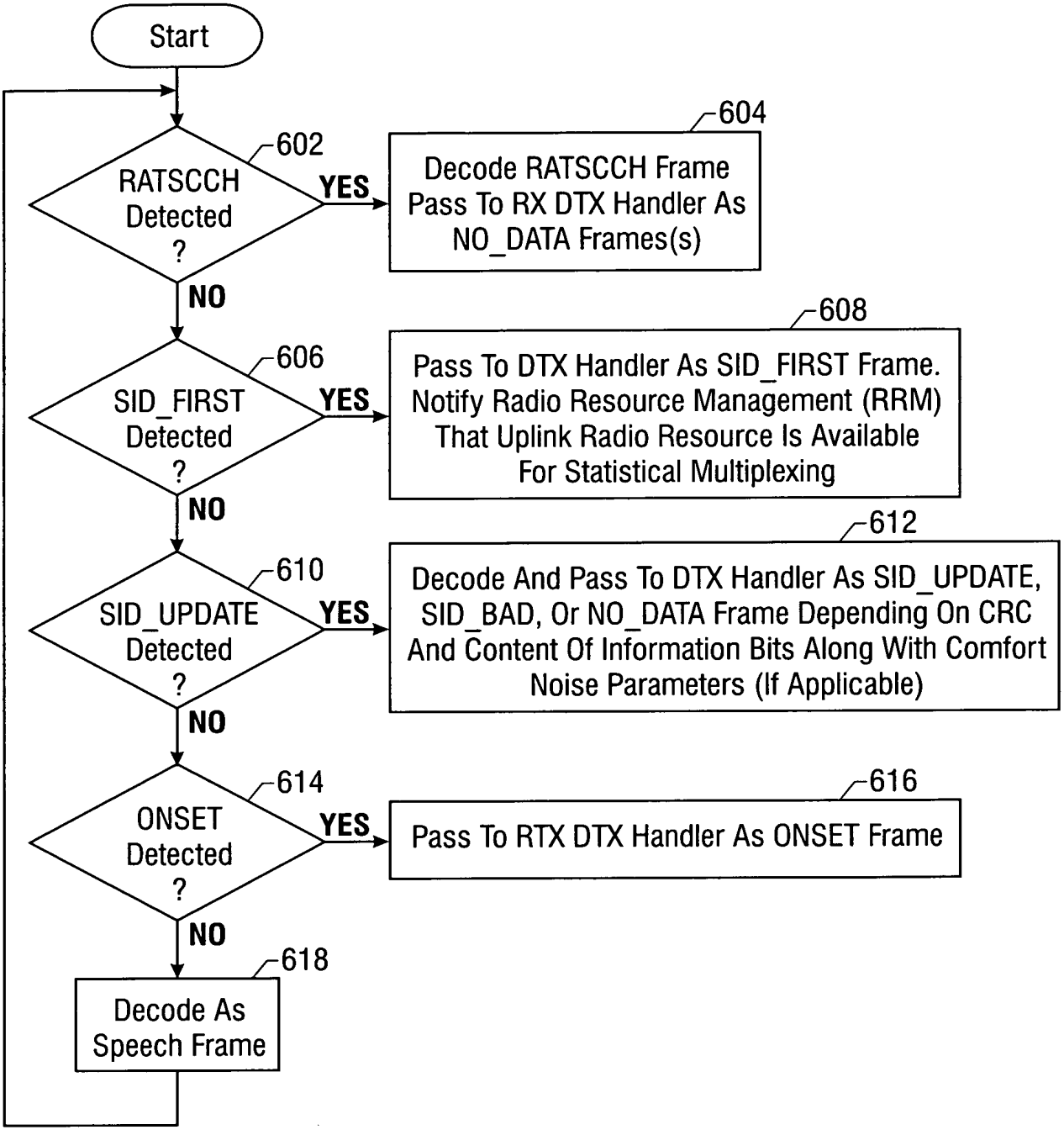

Start
602
RATSCCH Detected ?
YES
604
Decode RATSCCH Frame Pass To RX DTX Handler As NO_DATA Frames(s)
NO
606
SID_FIRST Detected ?
YES
608
Pass To DTX Handler As SID_FIRST Frame. Notify Radio Resource Management (RRM) That Uplink Radio Resource Is Available For Statistical Multiplexing
NO
610
SID_UPDATE Detected ?
YES
612
Decode And Pass To DTX Handler As SID_UPDATE, SID_BAD, Or NO_DATA Frame Depending On CRC And Content Of Information Bits Along With Comfort Noise Parameters (If Applicable)
NO
614
ONSET Detected ?
YES
616
Pass To RTX DTX Handler As ONSET Frame
NO
618
Decode As Speech Frame

FIG. 11

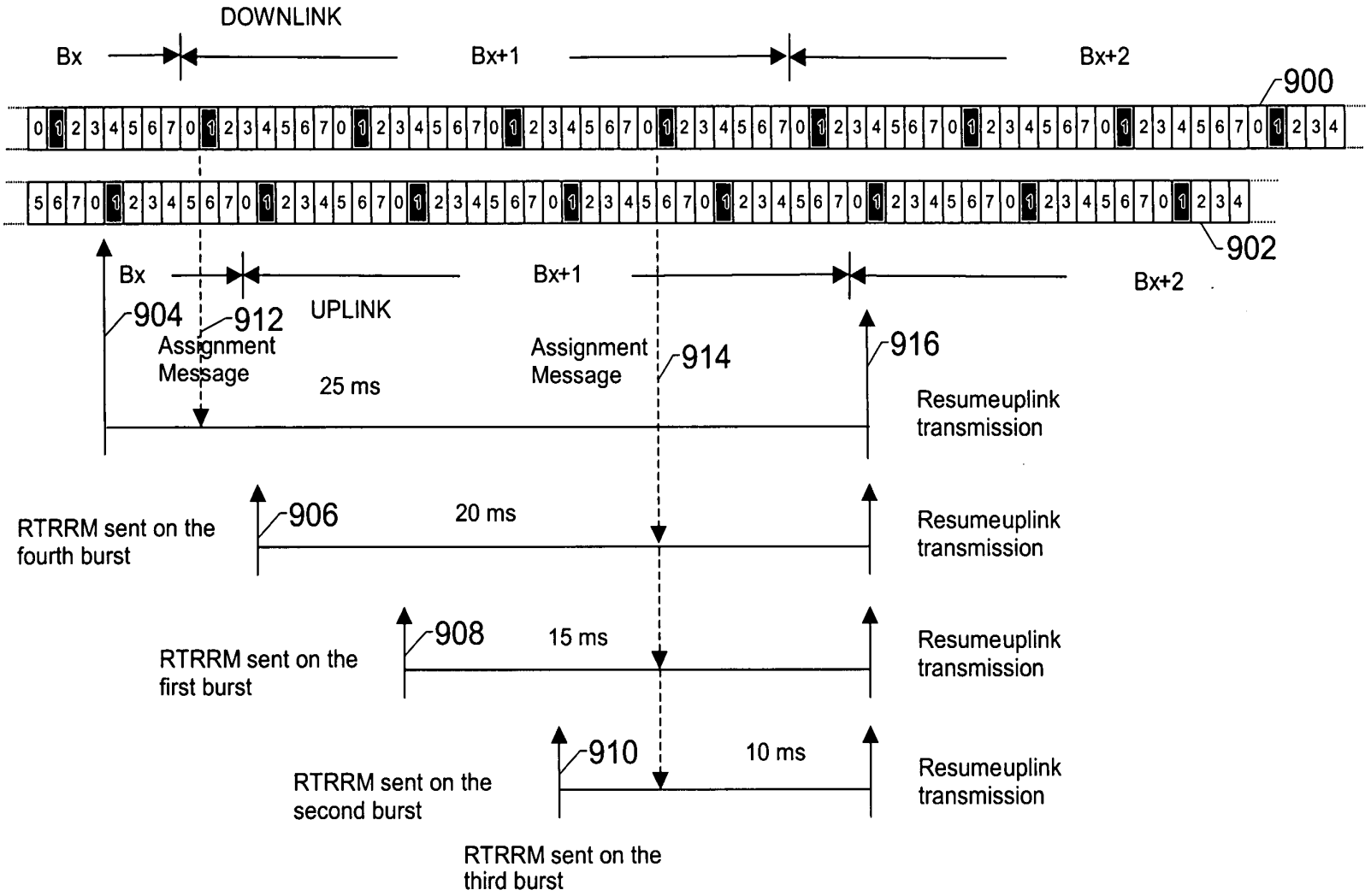


FIG. 12

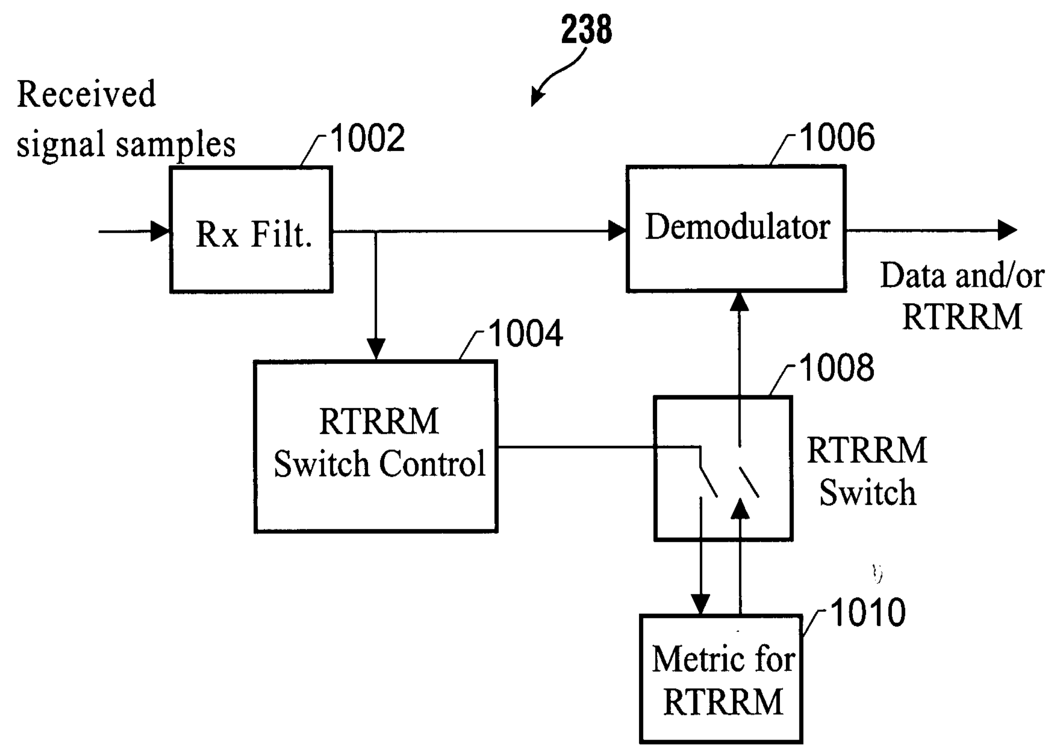

238
Received
signal samples
1002
Rx Filt.
1006
Demodulator
Data and/or
RTRRM
1004
RTRRM
Switch Control
1008
RTRRM
Switch
1010
Metric for
RTRRM

FIG. 13